

**REMARKS**

The Examiner's Action mailed on September 8, 2006, has been received and its contents carefully considered.

In this Amendment, Applicants have editorially amended the specification, added new claim 11 and cancelled claims 1-10 without prejudice. Claim 11 is the sole claim pending in the application. For at least the following reasons, it is submitted that this application is in condition for allowance.

Claims 1-10 were rejected under 35 USC §112, ¶2 as indefinite. It is respectfully submitted that this rejection is moot in light of the cancellation of claims 1-10.

Claims 1, 9 and 10 were rejected under 35 USC §102(b) as anticipated by *Maeda et al.* (US 2002/0026532 A1), This rejection is respectfully traversed to the extent that it may relate to claim 11, and is otherwise moot.

Claims 1-10 have been replaced with new claim 11, which is supported, for example, by FIG. 3 and by the description in the specification from page 4 onwards.

*Maeda et al.* discloses a protocol conversion connector **10** that includes a UART , an RJ45 connector **10a**, an Ethernet controller and an RS232C transceiver. The Ethernet controller, the UART and the RS232C transceiver each form part of a protocol conversion interface **10e** within protocol conversion connector **10**. Various kinds of information are displayed either on a screen of a

communication server **6** that is connected to protocol conversion connector **10** via a communication network **1** (see Fig. 1), or on a display screen of a mobile terminal **8** that is connected to protocol conversion connector **10** via a control line **2** (see Fig. 8). Fig. 7 gives an example of displayed information. However, there does not appear to be any information displayed at the protocol conversion connector **10** itself. Status information is stored in, but not displayed by, memory **10i**, which is connected to the UART. Further, no details of the circuitry of, for example, the Ethernet controller or the RS232C transceiver are given.

In relation to former claim 1, the Office Action deems the Ethernet controller of *Maeda et al.* to be the claimed capturing unit, deems the RS232 transceiver thereof to be the claimed driving unit, and alleges with regard to the claimed display unit that in *Maeda et al.* “fig 1 element 10 connected to element 4 is a single pixel binary display that works when the signals of the UART are received thus indicating their working status – paragraphs 58-59”.

Taking the display unit first, element **10** of *Maeda et al.* is the protocol conversion connector in its entirety and element **4** is a network-adapted appliance. Moreover, none of the elements shown in Fig. 1 of *Maeda et al.* is identified anywhere in the specification as “a single pixel binary display” or the like. Further, if we turn to ¶¶[0058 – [0059] of *Maeda et al.* that are referred to, these in fact read as follows:

[0058] Such a protocol conversion connector **10** is provided with the primary connecting portion **10a** in order to send and receive control signals between the network connected with the communication server **6** and is provided with the secondary connecting portion **10b** in order to send and receive control signals between the network-adapted appliance **4**. The control signals sent and received between the primary connecting portion **10a** and the control signals sent and received between the secondary connection portion **10b** are constructed so as to be communicated by converting protocol each other at a protocol conversion interface **10e** provided in between. In FIG. 2a, the feeder connecting portion **10d** for connecting a power source supplied by being connected to the power line **3** to the secondary connecting portion **10b**, and feeding electricity to the network-adapted appliance **4** via the electric supply line **3a** is provided. However, such a feeder connecting portion **10d** isn't essential in the present invention.

[0059] For example as shown in FIG. 2b, the protocol conversion interface **10e** includes a device such as pulse transformer, the Ethernet controller, UART microcomputer, and RS232C transceiver in order to convert protocol each other between a primary high-functional communication method (the Ethernet) and a secondary normal communication method (RS232C). When the control signals sent and received via the primary connecting portion **10a** and the control signals sent and received via the secondary connecting portion **10b** are different, mutual communication can be executed because of such a protocol conversion function. The reference numeral **10i** is a memory for storing positional information, described later, and is added if necessary.

Hence, the paragraphs relied upon are apparently silent as to a display unit.

Moreover, even if the display screen of either the communication server **6** or the mobile terminal **8** was considered to be the claimed display unit, neither of these comprises an element of the converter, and neither do they have "a first light-emitting diode (LED), the first LED lighting when the N pole of the first LED receives a low voltage signal; and a second, LED, the second LED lighting when the P pole of the second LED receives a high voltage signal" as presently recited in claim 11. Furthermore, neither the protocol conversion connector **10**, nor the

network-adapted appliance 4, of *Maeda et al.* comprises the above-recited features.

Regarding the claimed capturing unit and the claimed driving unit, *Maeda et al.* fails to provide any internal details of the circuitry of the Ethernet controller or of the RS232C transceiver respectively, as already noted.

Consequently, *Maeda et al.* fails to teach or suggest either that the capturing unit has “a buffer switch, a first OR gate switch and a second OR gate switch” or that the driving unit comprises “a first metal-oxide semiconductor (MOS) switch, when the gate electrode of the first MOS switch receives a high voltage signal, the first MOS switch having a high voltage signal connecting to the P pole of the second LED; and a second MOS switch, when the gate electrode of the second MOS switch receives a high voltage signal, the second MOS switch having a high voltage signal connecting to the P pole of the second LED”, as presently recited in claim 11.

Further, lacking the above teachings, *Maeda et al.* is unable to teach or suggest a converter “wherein the buffer switch buffers the RXD signal to the N pole of the first LED, the first OR gate processes the RTS signal and the CTS signal to output to the gate electrode of the first MOS switch, and the second OR gate processes the DSR signal and the DTR signal to output to the gate electrode of the second MOS switch” as also recited in claim 11.

Claim 11 therefore patentably defines over *Maeda et al.*, and is allowable.

Claims 2-8 were rejected under 35 USC 103(a) as obvious over the combination of *Maeda et al.* with "Serial and Parallel Cable Schematics and Wiring Diagrams", <http://www.jspayne.com/io/schematics.html> (hereinafter *SPCSWD*). It is respectfully submitted that this rejection is moot.

Claims 2-8 have been cancelled, and *SPCSWD* fails to remedy the above-noted deficiencies of *Maeda et al.* in relation to claim 11. *SPCSWD* is relied upon in the Office Action for showing RXD, CTS and DSR connections to DB-9 connectors, and does not teach or suggest any of the above-noted features of claim 11. Therefore claim 11 is also allowable over the combination of *Maeda et al.* and *SPCSWD*.

It is submitted that this application is in condition for allowance. Such action and the passing of this case to issue are requested.

Should the Examiner feel that a conference would help to expedite the prosecution of this application, the Examiner is hereby invited to contact the undersigned counsel to arrange for such an interview.

Should any fee be required, however, the Commissioner is hereby authorized to charge the fee to our Deposit Account No. 18-0002, and advise us accordingly.

Respectfully submitted,



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Date

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